

REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 1 – 40 are pending in the application. Currently, claims 1 – 11, 14 – 26, 30, 31, and 35 stand rejected, claims 29 and 32 stand objected to, and claims 12, 13, 27, 28, 33, 34, and 36 – 40 have been withdrawn from consideration.

By the present amendment, claims 1, 3, 4, 26, 29, 31, and 32 have been amended and claim 2 has been cancelled.

In the office action mailed August 11, 2003, the Examiner required restriction between the invention of group I, claims 1 – 36, and the invention of group II, claims 37 – 40. Applicants hereby confirm the election of group I with traverse.

With regard to the restriction requirement, the Examiner should withdraw same. Claims 37 – 40 are directed to a wall system for use in an air breathing propulsion system. Each of the elements of claim 37 have already been examined in claims 1 – 36. For example, the Examiner has already examined claim 17 which is directed to a wall system for use in a propulsion system and claim 35 which is directed to an airbreathing propulsion system. Thus, for the sake of economy, as well as Examiner consistency, claims 36 – 40 should also be examined. The Examiner is respectfully requested to withdraw the restriction requirement and examine all claims. It would work no hardship on the Examiner to take such action.

Applicants hereby confirm the election of the species of FIGS. 1, 7, and claims 32 and 35. Claims 1, 14, and 17 are generic.

Further, in said office action, the Examiner objected to the drawings as not showing reference numeral 54. A proposed drawing correction is attached hereto. The Examiner is hereby requested to approve same.

Still further in said office action, claims 1 – 11, 26, and 32 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. With regard to claims 26 and 31, appropriate amendments have been made to change the phrase “said coolant containment system” in claim 31 to “said coolant containment device” and to add the word “conduit” after the phrase “said fuel inlet”. With regard to claim 1, there is absolutely no indefiniteness anywhere in the claim. Applicants hereby confirm that they really want to claim that the panels and containment device

are not attached to each other. The word “attached” as used in the claim has nothing to do with whether the panels are in contact with the containment device.

Claims 1 and 10 – 11 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,899,077 to Wright et al. By the present amendment, the subject matter of claim 2 has been incorporated into claim 1. Therefore, the anticipation rejection has been mooted.

Claims 1 – 5, 14, 16 – 18, 23 – 25, 30, 31, and 35 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,838,031 to Cramer in view of U.S. Patent No. 6,182,442 to Schmidt et al. Independent claims 1, 14 and 17 are allowable over this combination of references for a number of reasons. First, the Examiner identifies Cramer’s fluid containment device as being element 42 which is also stated to be the first panel. Thus, Cramer can not meet the limitation in claims 1, 14, and 17 of a fluid containment device sandwiched between the first and second panels. A review of Cramer shows that it is a liner to be used in a combustion section of an engine where one wants a fluid coolant to flow into the combustion zone. Thus, Cramer does not have, and would not have, anything which can be called a fluid containment device. The rejection also fails because Cramer is clear that in his liner, the first panel is to be formed from a ceramic material and the second panel, the layer 38 is to be formed from a metallic material. The layer 38 is formed from a metallic material because it abuts the chamber wall 25 which is also formed from a metallic material. Still further, the metallic material forming layer 38 is used to conduct heat from the posts 41 to the chamber wall 25. One of ordinary skill in the art would have no reason to modify layer 38 to be formed from a material other than a metallic material. To form layer 38 from a carbon/carbon composite or a carbon/silicon carbide composite material is to introduce problems into the Cramer system. For example, placing such a material next to the metal chamber wall would introduce thermal stresses, due to the different rates of thermal expansion, which would cause the layer 38 to crack. Further, introducing such a composite material would interfere with the heat transfer properties of the layer 38 as it interacts with the posts 41. One of ordinary skill in the art would not make the material substitutions made by the Examiner. The rejection made by the Examiner is nothing more than a hindsight rejection.

Claims 3 – 5, 16, 18, 23 – 25, 30, 31 and 35 are allowable for the same reasons as claims 1, 14, and 17 as well as on their own accord. Claim 31 is also allowable because the primary reference to Cramer does not use a plurality of tubular passageways which extend parallel to a longitudinal axis of the wall system. Claim 35 is allowable because neither of the cited and applied references is directed to a scramjet engine. Cramer is directed to a liner for a combustion chamber of a gas turbine engine and Schmidt is directed to a rocket engine.

Claims 6 – 9, 15, 19 – 22, and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Cramer and Schmidt in view of U.S. Patent No. 6,042,315 to Miller. Miller does not cure the deficiencies of Cramer and Schmidt. Thus, claims 6 – 9, 15, 19 – 22, and 25 are allowable for the same reasons as their parent claims as well as on their own accord. With regard to claims 6 – 9, 15, 19 – 22, there is no reason to use the claimed composite fastener in Cramer's liner. In fact, the use of such composite fasteners would likely interfere with the operation of the various Cramer layers which are used to defuse the problem of thermal stresses due to the different thermal of expansion rates of the layers 38 and 42.

Claim 26 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Cramer, Schmidt, and Miller, and further in view of U.S. Patent No. 5,150,570 to Shekleton. Claim 26 is allowable for the same reason as its parent claim as well as on its own accord. Shekleton does not overcome the deficiencies of the Cramer, Schmidt and Miller patents. Further, one of ordinary skill in the art could not incorporate the fuel injection system of Shekleton into the Cramer's combustion chamber without destroying the combustion liner system which is the invention in Cramer.

By the present amendment, claims 29 and 32 have been placed into independent form and are therefore now allowable.

For these reasons, claims 1, 3 – 11, 14 – 26, 30, 31, and 35 are believed to be allowable. The Examiner is hereby requested to allow these claims and all those which depend from them.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicants' attorney at the telephone number listed below.

Appl. No. 10/058,621
Amdt. dated Nov. 12, 2003
Reply to office action of Aug. 13, 2003

The Commissioner is hereby authorized to charge said extra independent claim fee to Deposit Account No. 21-0279. Should the Commissioner determine that an additional fee is due, he is hereby authorized to charge said fee to said Deposit Account.

Respectfully submitted,

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By



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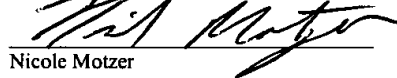
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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on November 12, 2003.



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